Center for Scientific Review
National Institutes of Health

Scientific Areas of Integrated Review Groups (IRGs)

For a listing of the Scientific Review Administrator and membership roster for each study section, click on the study section roster under the study section name within an IRG listed below or go to the study section index (study sections listed alphabetically) and click on the specified roster next to the name of the study section.

Last updated on 20th August, 2004

Referral & Review

AIDS and Related Research IRG [AARR] PRINTER FRIENDLY

The AIDS and AIDS-Related Research [AARR] IRG reviews all - basic, translational, clinical, and behavioral – aspects of HIV/AIDS research. This includes studies of: the molecular and cell biology, immunology, pathogenesis, and epidemiology of HIV and related viruses, as well as AIDS-associated opportunistic infections; the development of drugs, vaccines, and other therapies; complications of therapy, as well as behavioral and social science approaches to preventing and evaluating the consequences of HIV/AIDS.

The following study sections are included within the AARR IRG:

Molecular and Cellular Biology Study Section (AMCB) **(Formerly AARR-1)**
AIDS Immunology and Pathogenesis Study Section (AIP) **(Formerly AARR-2)**
AIDS Discovery and Development of Therapeutics Study Section (ADDT) **(Formerly AARR-3)**
AIDS-associated Opportunistic Infections and Cancer Study Section (AOIC) **(Formerly AARR-4)**
NeuroAIDS and other End-organ Diseases Study Section (NAED) **(Formerly AARR-5)**
AIDS Clinical studies and Epidemiology Study Section (ACE) **(Formerly AARR-6)**
Behavioral and Social Science Approaches to Preventing HIV/AIDS Study Section (BSPH) **(Formerly AARR-7)**
Behavioral and Social Consequences of HIV/AIDS Study Section (BSCH) **(Formerly AARR-8)**
HIV/AIDS Vaccines Study Section (VACC)
AARR Small Business Activities

All AIDS-related applications are reviewed on an expedited cycle due to a Congressional mandate, and are hence reviewed by one of the following study sections within the AARR IRG or by Special Emphasis Panels. AIDS-related applications that are appropriate for review by any of the other CSR study sections cannot be referred there due to the differences in the receipt and review dates within the review cycle. The VACC study section formerly reviewed all vaccine-related applications. However, the reorganization of the Immunology [IMM] IRG and the establishment of the Vaccines Against Microbial Diseases [VMD] study section has changed this referral pattern. Only applications with research directed to HIV/AIDS vaccines are assigned to AARR/VACC. Applications focusing on vaccine development for other infectious diseases are assigned to the Immunology IRG.

AIDS Molecular and Cellular Biology [AMCB] Study Section

(Formerly AARR-1)

[AMCB Roster]

AIDS Molecular and Cellular Biology [AMCB] Study Section reviews applications focused on the molecular, structural, and cellular biology of HIV and related lentiviruses/retroviruses. These areas of research encompass studies of the biochemistry and genetics of HIV and viral infection, replication, and regulation. This Study Section also reviews applications related to viral aspects of pathogenesis, non-immune host responses and factors, and identification of viral/host targets for gene-based and other therapeutics and diagnostics.

Specific areas covered by AMCB:

- Molecular biology, cell biology, and virology of HIV and related lentiviruses
- Molecular basis of lentiviral pathogenicity
- Biochemistry of HIV and related lentiviruses
- Regulation of viral and cellular biochemical processes, including tissue-specific effects of HIV
- Role of host gene products in virus infection and replication
- Variation in host factors and impact on virus infection and replication
- Mechanism of action and structure-function studies of viral and gene products
- In vitro and in vivo activity of viral gene and gene products in different cell types
- Genetics of HIV and related viruses
- Mechanisms of host resistance, with emphasis on non-immune mechanisms
- Mechanisms and regulation of viral replication
- Molecular biology of gene therapy and ribozymes
- Molecular and cellular biology of the impact of cofactors on viral pathogenesis
- Design and development of new molecular-based diagnostics and assays
- Basic virology of animal models, including non-primate lentivirus systems

AMCB has the following shared interests within the AARR IRG:

- Applications with emphasis on virology are reviewed in AMCB; those with emphasis on the host and host response to the virus are reviewed in AIP.

- Applications using animal models to study the growth of the virus are reviewed in AMCB; those with emphasis on the host response are reviewed in AIP.

- Studies of host factors for viral growth and how these can be co-factors for resistance or enhancement of infection or disease progression are reviewed in AMCB, whereas studies of immune-based factors are reviewed in AIP.

- For viral genes and gene products, AMCB reviews mechanisms of action, regulation, and means of interaction with host factors, whereas ADDT reviews applications that use this information for assays and screens in therapeutics discovery.

- AMCB reviews the regulation of viral and cellular biochemical processes in general, while grants dealing with CNS-specific aspects of viral regulation are reviewed by NAED.

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AIDS Immunology and Pathogenesis Study Section [AIP]

(Formerly AARR-2)

[AIP Roster]

The AIDS Immunology and Pathogenesis [AIP] Study Section reviews applications related to the immunology and pathogenesis of HIV and related lentiviruses/retroviruses. Research includes cellular and humoral responses to HIV(and related lentiviruses), and mechanisms of transmission, initiation, and establishment of HIV infection at a cellular and tissue level, including animal models. This Study Section also reviews studies of immune mechanisms of host resistance, mechanisms of vaccine-induced immunity, and the effect of various infectious and other co-factors on pathogenesis, immune responses, and disease progression.

Specific areas covered by AIP:

- Innate immunity to HIV and related viruses
- Cellular and humoral immune responses to HIV and related viruses and mechanisms of host resistance
- Studies of mucosal immune responses to HIV and other lentiviruses
- Mechanisms of HIV antigen processing, and methods to augment particular immune responses and effector cells
- Mechanisms of HIV-mediated impairment of host responses, including HIV-related bone marrow dysfunction
- Immunological studies of transmission, initiation and establishment of HIV infection
- Immunopathogenesis and immunoregulation of HIV and related viruses
- Clinical immunology of HIV disease
- Molecular, cellular, and tissue-based studies of interactions between noninfectious [e.g., alcohol or other substance of abuse] or infectious co-factors [e.g., HIV and AIDS-associated opportunistic infections, with emphasis on HIV and disease progression]

AIP has the following shared interests within the AARR IRG:

- Studies that emphasize virology are assigned to AMCB; those with an emphasis on the host or host responses to the virus are assigned to AIP. Also, studies of animal models that emphasize the growth of the virus are reviewed in AMCB; those with an emphasis on the host response are reviewed in AIP. Studies of host factors for viral growth and how these can be co-factors for resistance/enhancement of infection or disease progression are reviewed in AMCB, whereas studies of immune- based factors are reviewed in AIP.
- NAED focuses on the interaction between HIV and [non- infectious] co-factors and how they combine to affect end-organ pathology, while AIP focuses on how these factors and co-factors combine to affect viral replication.

- Epidemiological studies that address questions of pathogenesis using molecular or biochemical assays are reviewed in AIP; population-based epidemiological studies that address more traditional epidemiological questions are reviewed in ACE.

- Applications that focus on animal models or vaccine development against HIV are appropriate for VACC study section.

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AIDS Discovery and Development of Therapeutics Study Section [ADDT]

Formerly AARR-3

[ADDT Roster]

The AIDS Discovery and Development of Therapeutics [ADDT] Study Section reviews applications concerned with the design, discovery, and development of therapeutics for HIV/AIDS. The science encompassed includes preclinical development of gene-based therapeutics and diagnostics, traditional drugs, targeted drug design and modeling based on structure, pharmacology, toxicology, drug delivery, and assays to measure drug/therapeutic levels. This Study Section also reviews applications related to the development of vector and cellular aspects/components of gene-based and immune reconstitution therapies for HIV/AIDS, viral resistance, and interactions of drugs/therapeutics used to treat/prevent HIV infection and associated complications, as well as other used/abused agents.

Specific areas covered by ADDT:

- Development of targeted screens for discovery of new anti-HIV agents
- Isolation and characterization of natural products as therapeutics/preventives for opportunistic infections
- Preclinical development of therapies for HIV/AIDS, AIDS-associated opportunistic infections, and cancers [including toxicology and pharmacology]
- Design and development of vectors for targeted delivery to cells and tissues, and for in vivo use
- Preclinical evaluation of gene-based therapies [e.g., ribozymes, trans- dominant inhibitors, anti-sense and si-RNA]
- Mechanisms of drug resistance
- Assay development for molecular-based measures of resistance, therapeutic efficacy, and effects of therapy on immune parameters
- Chemistry, pharmacology, and biochemistry of target compounds for HIV and AIDS-associated opportunistic infections
- Studies of drug-drug interactions

ADDT has the following shared interests within the AARR IRG:

- Studies dealing with mechanism of action, regulation, and means of interaction of viral genes and/or gene products with host factors are reviewed by AMCB, whereas ADDT reviews applications that use this information for assays and screens in therapeutics discovery.

- ADDT shares interest with AOIC in studies of AIDS-associated opportunistic infections. ADDT reviews targeted screening, natural products isolation, and characterization and drug development after anti-microbial/viral activity has been established, whereas AOIC covers the microbiology of the opportunistic infections, especially their pathogenesis.

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AIDS-associated Opportunistic Infections and Cancer Study Section [AOIC]

Formerly AARR-4

[AOIC Roster]

The AIDS-associated Opportunistic Infections and Cancer [AOIC] Study Section reviews applications on opportunistic infections and cancers associated with HIV and AIDS. The science encompasses pathogenesis, immune responses, animal models, and molecular epidemiology and molecular characterization of AIDS-associated opportunistic infections and cancers. This Study Section also reviews applications that focus on the interactions of opportunistic infections and cancers with HIV infection, and those focused on the identification and development of targets for therapy and prophylaxis for opportunistic infections. **Proposals should address opportunistic infections in the context of HIV infection/AIDS.**

Specific areas covered by AOIC:

- Molecular, cellular, and tissue-based studies of pathogenesis of AIDS-associated opportunistic infections, including viral pathogens
- Studies of interactions among multiple pathogens
- Studies of pathogenesis of HIV/AIDS- associated cancers, including animal models
- Animal models of AIDS-associated opportunistic infections
- Immunology of AIDS-associated opportunistic infections
- Molecular and genetic epidemiology as related to opportunistic infections and AIDS-associated neoplasms
- Discovery/identification of therapeutic targets for AIDS-associated opportunistic infections

AOIC has the following shared interests within the AARR IRG:

- Studies dealing with the microbiology of the opportunistic infections, especially their pathogenesis, are reviewed by AOIC, whereas those assigned to ADDT cover targeted screening, natural products isolation, and characterization and drug development after anti-microbial/viral activity has been established.

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NeuroAIDS and other End-organ Diseases Study Section [NAED]

Formerly AARR-5

[NAED Roster]

The NeuroAIDS and other End-organ Diseases [NAED] Study Section reviews applications on the effects of HIV infection and of AIDS on the nervous system and other organs and systems, and the actions of abused substances, their cognate ligands, and hormones on cellular immune processes. This includes neural-chemokine, neural-cytokine, neuroendocrine, and neuroimmune relationships and similar interactions in other organ systems. The pertinent areas of research also include modulation of the HIV, retroviral, and related diseases by drugs and other co-factors.

Specific areas covered by NAED:

- Neurovirology, neuroimmunology, neuroendocrinology, behavioral immunology, and neuroimaging related to pathogenesis of HIV (and related viruses)
- Cell and molecular biology of HIV and glial-neuronal interactions
- Molecular and tissue-based studies of psychological effects of HIV disease
- Physiology and cell biology of cytokine-hormonal interactions in CNS and other organ systems
- Modulatory effects of pharmacological factors and their cognate ligands on neuroimmune systems and

HIV infection

- Immunology, macrophage biology, endothelial cell biology, and pharmacology of drug abuse
- Studies of effects of used and abused substances and neuroactive drugs on establishment of infection, immunopathogenesis, neuropathogenesis, and disease progression
- Molecular and tissue-based studies HIV in non-lymphoid organ systems
- Studies of HIV-induced cardiomyopathy, renal disease, pulmonary dysfunction and other end-organ pathology

NAED has the following shared interests within the AARR IRG:

- AMCB emphasizes the regulation of viral and cellular biochemical processes, whereas NAED emphasizes the CNS-specific effects on virus regulation.

- AIP emphasizes the impact of the virus and the immune response in lymphoid systems, whereas NAED reviews applications that focus nervous system, and other end-organ diseases such as nephropathy and cardiomyopathy.

- NAED reviews studies of neuropathology that impact on neuronal function at the cellular level; ACE focuses on studies of clinical trials that may impact neuroAIDS and have neurological assessment as an outcome. Studies of cognitive dysfunction that affect behavior and adherence to therapy may be reviewed in BSCH.

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AIDS Clinical studies and Epidemiology Study Section [ACE]

Formerly AARR-6

[ACE Roster]

AIDS Clinical studies and Epidemiology [ACE] Study Section reviews studies of epidemiology, natural history, in vivo pathogenesis, and transmission of HIV infection in defined cohorts, and clinical studies/trials related to HIV/AIDS and associated opportunistic infections and cancers. This Study Section also reviews research related to nutrition and wasting, complementary and alternative medicine approaches, and clinical development of therapeutics, prophylactic agents, and biomedical interventions to treat or prevent HIV/AIDS and associated opportunistic infections and cancers. In addition, it addresses the development of diagnostics, clinical assays, and mathematical models.

Specific areas covered by ACE:

- Population-based epidemiology and natural history of HIV infection, outcomes of anti-HIV chemotherapy, AIDS-associated opportunistic infections and cancers
- In vivo pathogenesis of disease and progression in pediatric and adult populations
- Multidisciplinary studies of epidemiology and/or medical interventions with biological and/or behavioral/psychological outcomes
- Transmission [perinatal and adult] of infection in human populations/cohorts
- Development, application, and evaluation of biological outcomes of interventions to prevent HIV infections and/or treat HIV disease
- Clinical development of therapeutics for treatment and prophylaxis [including antivirals, immune restoration, gene-based therapies, opportunistic infections, AIDS- associated cancers, and neurological consequences]

- Development of clinical diagnostics
- Complementary and alternative therapies and non-behavioral interventions
- Metabolic abnormalities and nutrition in HIV/AIDS
- Pharmacological interaction, including HIV and other therapeutics, and substances of abuse and addiction
- Development of biostatistical tools for epidemiological and cohort analysis and for clinical trials
- Mathematical modeling of viral infection, transmission, and disease progression

ACE has the following shared interests within the AARR IRG:

- Development of molecular or immunological assays for epidemiological studies are reviewed in AMCB or AIP, while population-based studies that address more traditional epidemiological questions are reviewed in ACE.

- NAED has an emphasis on studies of neuropathology that impact on neuronal function at the tissue or cellular level; ACE addresses population-based epidemiology studies of nervous system dysfunction or drug abuse in AIDS.

- Intervention studies that include primarily biomedical outcomes are reviewed in ACE; those studies that include primarily behavioral outcomes with standard virological/immunological measures are reviewed in BSPH and BSCH. Epidemiological studies of HIV infection and AIDS-defining illness are emphasized in ACE; epidemiological studies of HIV risk behaviors are emphasized in BSPH and BSCH.

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Behavioral and Social Science Approaches to Preventing HIV/AIDS Study Section [BSPH]

Formerly AARR-7

[BSPH Roster]

Behavioral and Social Science Approaches to Preventing HIV/AIDS [BSPH] Study Section reviews studies of behavioral and social science aspects of HIV transmission and infection in the individual, group, and community. Specifically, it reviews studies of risk factors, antecedents, and correlates of HIV infection, as well as basic behavioral, epidemiologic, and social science studies of mechanisms and factors at the individual and community levels. In addition, it reviews research on the development and testing of the efficacy of psychosocial interventions to prevent HIV infection in at-risk populations.

Specific areas covered by BSPH:

- Epidemiologic and ethnographic aspects of the incidence, prevalence, nature, and extent of HIV risk behaviors, their correlates, and antecedents; the settings in which risk behaviors occur; and the impact of co-occurring substance abuse and mental disorders
- Basic behavioral and social science aspects of HIV risk behaviors, behavior change, maintenance of behavior change, and relapse to risky behaviors
- Development and testing of interventions to reduce risk behaviors, and efficacy of intervention strategies to reduce HIV risk behaviors
- Development of HIV/AIDS educational products and programs regarding prevention
- Multidisciplinary studies of epidemiology and/or interventions with predominantly behavioral/psychological outcomes and some standard biological outcomes
- Recruitment, retention, and adherence in a clinical/cohort setting

- Epidemiological and ethnographic studies of HIV risk among the seriously mentally ill and other vulnerable populations, such as the homeless, prisoners, and chronic substance abusers

BSPH has the following shared interests within the AARR IRG:

- Epidemiologic studies of HIV infection and AIDS-defining illnesses are emphasized in ACE; epidemiologic studies of HIV risk behaviors are reviewed in BSPH.

- Evaluation of interventions based on information from previous epidemiological studies may be reviewed by either BSPH or BSCH. BSPH reviews studies focusing on the prevention/transmission of infection while studies focusing on behavior change in an infected population are reviewed by BSCH.

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Behavioral and Social Consequences of HIV/AIDS Study Section [BSCH]

Formerly AARR-8

[BSCH Roster]

Behavioral and Social Consequences of HIV/AIDS [BSCH] Study Section reviews studies of behavioral and psychosocial aspects of HIV infection, disease progression, and sequelae in the individual, group, and community. In addition, it reviews epidemiological, survey, health services, and other social science research of psychosocial factors of HIV disease. These outcome studies include the effectiveness of interventions, the consequences of infection, and the effects of HIV infection and AIDS on the individual, family, and community.

Specific areas covered by BSCH:

- Effects of HIV infection and AIDS on behavioral, cognitive, and social functioning
- Behavioral and social aspects of recruitment, retention, and adherence in a clinical/cohort setting
- Effectiveness of intervention strategies to reduce HIV risk behaviors among infected populations
- Improvement of qualitative and quantitative assessment of behavioral and social factors associated with HIV infection and disease progression
- Behavioral and social impact on quality of life in HIV/AIDS
- Depression and other psychiatric disorders, and substance abuse in HIV/AIDS
- Caregiving and family-based studies
- Development of HIV/AIDS educational products and programs [re: adherence]
- Interventions to prevent social stigmatization of children and adults who are at risk of HIV infection
- Health services, including caregiving, access, utilization, linkage, cost effectiveness, and economics

BSCH has the following shared interests within the AARR IRG:

- Epidemiologic studies of HIV infection and AIDS-defining illnesses are reviewed in ACE
- Behavioral and psychosocial studies focused on uninfected individuals/populations are reviewed in BSPH; those focused on infected individuals/populations are reviewed in BSCH.

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HIV/AIDS Vaccines Study Section [VACC]

[VACC Roster]

The HIV/AIDS Vaccines [VACC] Study Section is focused on the review of developmental activities for vaccines against HIV and related retroviruses. Occasionally, applications for development of vaccines for AIDS-associated opportunistic infections may also be reviewed. The area of "vaccinology research" is both broad and application-oriented as it relates to crosscutting issues encountered in the refinement and development of vaccines. These include the design and development of effective immunogens, delivery and formulation approaches, methodologies to assess vaccine responses, and the assessment of safety and efficacy of candidate vaccines in animal models and human subjects.

Specific areas covered by VACC:

- Studies to modify and/or optimize HIV components [e.g. antigen[s], gene product[s]] as targets for vaccine development
- Impact of HIV polymorphism on vaccine design and development
- Studies of vector/vaccine expression of vaccine component[s] for stimulating/maximizing a protective immune response
- Studies on the improvement of methods for maximizing production of candidate vaccines or vaccine products
- Development or optimization of vaccine delivery systems
- Use of adjuvants and other immunostimulatory approaches to augment or modify immune responses
- Development of new approaches to improve safety or immunogenicity of existing vaccines
- Development of new approaches to improve safety or immunogenicity of candidate vaccines
- Development of methods to assess functional measures of protective immune responses
- Evaluation of immune protection to challenge in appropriate animal models, including the improvement/retooling of animal models for vaccine testing
- Comparative studies of immune protection with different vaccine designs/candidates in animal/humans
- Evaluation of vaccine candidates in animal models for safety [including potential for immunopotentiation of disease], immunogenicity and protection
- Early (Phase I/II) clinical testing of candidate vaccines in human volunteers for all aspects of safety and/or efficacy.
- Evaluation of specificity, type, and duration of human immune responses to candidate vaccines

VACC has the following shared Interests within the AARR IRG:

- Studies of discovery and design of viral vectors where an HIV/AIDS vaccine is not in development should be reviewed in AMCB and the appropriate virology Study Sections; other vector discovery should be reviewed in the appropriate microbiology Study Sections. Development and/or optimization of vectored vaccines are appropriate for the VACC Study Section.

- Studies of immune responses to HIV, antigen processing, and mechanisms of protective immunity may also be appropriate for AIP, while immunology of AIDS-associated opportunistic pathogens may be appropriate for AOIC.

- Epidemiological and large clinical trials of vaccine efficacy is appropriate for ACE, while vaccine acceptability studies are appropriate for BSPH.

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AIDS and AIDS-related research Small Business Activities Special Emphasis Panels

[AARR Small Business SEPs]

AARR Small Business SEPs

The AIDS and AIDS-Related Research Small Business Activities Special Emphasis Panels [AARR Small Business SEPs] review small business applications including Small Business Innovation Research [SBIR] and Small Business Technology Transfer [STTR] grant applications concerned with biological sciences, vaccine research, and social/behavioral sciences in the area of HIV/AIDS.

AARR Small Business SEP - AIDS Biological Sciences [AARR 10]

The AARR 10 special emphasis panel reviews SBIR and STTR applications that focus on the development of diagnostics, therapeutic agents and other biological aspects related to HIV/AIDS Research.

AARR Small Business SEP - AIDS Vaccine Research [AARR 11]

The AARR 11 special emphasis panel reviews SBIR and STTR applications that focus on the development of reagents and technologies relevant to HIV/AIDS Vaccine Research.

AARR Small Business SEP - AIDS Social & Behavioral Sciences [AARR 12]

The AARR 12 special emphasis panel reviews SBIR and STTR applications that focus on the development of tools and technologies relevant to HIV/AIDS Behavioral and Social Science Research.

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